IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM and HYDRO-QUÉBEC,	§	
Plaintiffs,	§	
v.	§	Civil Action No. 3:06-cv-1655-B
A123 SYSTEMS, INC., BLACK & DECKER CORPORATION, and BLACK & DECKER (U.S.) INC.	§	
Defendants.	§	

THE BLACK & DECKER CORPORATION AND BLACK & DECKER (U.S.) INC.'S ANSWER TO PLAINTIFFS' SECOND AMENDED COMPLAINT, COUNTERCLAIMS, AND JURY DEMAND

Defendants, The Black & Decker Corporation and Black & Decker (U.S.) Inc. (collectively "Black & Decker") respond to the Second Amended Complaint filed by Plaintiffs The Board of Regents of the University of Texas System and Hydro-Québec, as follows:

Black & Decker lacks knowledge or information sufficient to form a belief as to the claims offered by Plaintiffs in the Preliminary Statement of the Second Amended Complaint, and therefore denies any and all such claims. Black & Decker further denies all claims and/or allegations by Plaintiffs set forth in the various section headings of Plaintiffs' Second Amended Complaint.

1. Plaintiff Board of Regents of the University of Texas System is an agency of the State of Texas, located at 201 West 7th Street, Austin, Texas 78701. UT is the largest component of The University of Texas System.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 1 of Plaintiffs' Second Amended Complaint.

2. Hydro-Québec is a Canadian crown corporation with its principal place of business in Montréal, Québec. The province of Québec is the sole shareholder of Hydro-Québec. Hydro-Québec's primary business is generating and distributing electricity to the citizens of Québec and other customers within Canada.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 2 of Plaintiffs' Second Amended Complaint.

3. Established in December 2001, A123 is a privately-held Delaware corporation its principal place of business in Watertown, Massachusetts. A123, through Black & Decker's national distribution channel, is selling A123's infringing rechargeable lithium metal phosphate batteries for use in Black & Decker's products, including, but not limited to, the DeWalt line of 36-volt cordless power tools. In addition to other acts that constitute doing business in Texas, A123 has committed acts of patent infringement in this state. The Court's exercise of personal jurisdiction over A123 would not offend due process business A123 should easily have foreseen that the injurious effect of its acts would be felt in Texas. Although A123 is doing business in Texas, it had not designated a registered agent for service of process in Texas. Therefore, A123 was properly served by serving the summons and complaint on the Texas Secretary of State with a copy forwarded to A123's registered agent for service of process in Massachusetts and President and CEO, David P. Vieau, Arsenal on the Charles, 321 Arsenal Street, Watertown, Massachusetts 02472. A123 has appeared in this action and does not contest the Court's personal jurisdiction over it or the manner in which it was served with process.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 3 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

4. Black & Decker Corporation is a publicly-traded company with its principal place of business in Towson, Maryland. It is a global manufacturer and marketer of power tools and accessories under the "Black & Decker" name as well as other trademarks and trade names,

including "DeWalt." According to the Black & Decker website, its "DEWALT tools can be found wherever tools are sold, nationally and internationally" and "[w]ith over 1,000 factory owned and authorized locations, DEWALT has one of the most extensive service and repair networks in North America." In addition to other acts that constitute doing business in Texas, Black & Decker Corporation has committed acts of patent infringement in this state. The Court's exercise of personal jurisdiction over Black & Decker Corporation would not offend due process because Black & Decker should easily have foreseen that the injurious effect of its acts would be felt in Texas. Although Black & Decker Corporation is doing business in Texas, it had not designated a registered agent for service of process in Texas. Therefore, Black & Decker Corporation was properly served with process by serving the summons and complaint on the Texas Secretary of State with a copy forwarded to Black & Decker Corporations' Maryland registered agent for service of process, Natalie A. Shields, 701 E. Joppa Road, Towson, Maryland 21286. Black & Decker Corporation has appeared in this action and does not contest the Court's personal jurisdiction over it or the manner in which it was served with process.

Response:

Denied.

5. Black & Decker (U.S.) Inc., a wholly-owned subsidiary of Black & Decker Corporation, is a Maryland corporation with its principal place of business in Towson, Maryland. It is registered to do business in Texas and was properly served with process through its registered agent for service of process, CT Corporation System, 350 N. St. Paul Street, Dallas, Texas 75201. Black & Decker (U.S.) Inc. has appeared in this action and does not contest the Court's personal jurisdiction over it or the manner in which it was served with process.

Response:

Admitted that Black & Decker (U.S.) Inc. is a wholly-owned subsidiary of The Black & Decker Corporation.

6. Black & Decker (U.S.) Inc. and Black & Decker Corporation are hereinafter jointly referred to as "Black & Decker."

Response:

Black & Decker admits that Plaintiff's Second Amended Complaint is referring to both Black & Decker (U.S.) Inc. and The Black & Decker Corporation as "Black & Decker."

7. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338, because Plaintiffs' claims arise under the patent laws and other statutes of the

United States.

Response:

Black & Decker admits that this Court has subject matter jurisdiction over patent infringement claims under 28 U.S.C. §1338(a), but denies the legal sufficiency of Plaintiffs' claims and allegations with respect to Black & Decker and denies that Plaintiffs have any viable claim thereunder. With respect to other parties, Black & Decker lacks sufficient knowledge and information to form a belief as to the truth of the allegations contained in Paragraph 7 of the Second Amended Complaint, and therefore denies those allegations. To the extent not expressly admitted, Black & Decker denies the allegations contained in Paragraph 7 of the Second Amended Complaint.

8. This Court has personal jurisdiction over A123, because it is doing business in Texas, and has committed torts inside and outside Texas that have caused harm in this state. Specifically, A123 is manufacturing and selling infringing batteries, which are being marketed for sale in Texas through its internet website and distributed through Black & Decker's established distribution channel in Black & Decker's products, including but not limited to, the DeWalt line of power tools. Plaintiffs' claims for patent infringement arise from A123's infringing activities in the State of Texas and throughout the United States which were calculated to cause and have caused substantial harm to the Board of Regents, an agency of the State of Texas. Even after being warned by Hydro-Québec that its battery products infringe the Board of Regents' '382 Patent, A123 intentionally delivered its infringing products into commerce with the expectation that they will be purchased by consumers in Texas. Further, A123 has received substantial investment funds from several entities licensed to conduct, and conducting, business in Texas, including Motorola Inc., GE Commercial Finance Technology Lending LLC, Qualcomm, Inc., and AllianceBernstein Investment Research and Management, Inc. Because the Board of Regents is a state agency, the State of Texas has a significant interest in this suit. In sum, A123's conduct and connections with Texas are purposeful and such that it must have reasonably foreseen that it would be sued in Texas by the Board of Regents, the owner of the patents in suit. A123 has appeared in this action and does not contest the propriety of venue in this Court or the exercise of personal jurisdiction over A123.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 8 of Plaintiffs' Second Amended Complaint and therefore denies those

allegations.

9. This Court has personal jurisdiction over Black & Decker because Black & Decker Corporation and Black & Decker (U.S.), Inc. have committed torts inside and outside Texas that have caused harm in this state. Specifically, Black & Decker is marketing and selling products, including but not limited to, its DeWalt line of 36-volt cordless power tools which contain Al23's infringing lithium metal phosphate batteries in stores, including Home Depot and Lowes, throughout the United States, including stores located in Dallas County, Texas. Plaintiffs' claims for patent infringement arise from Black & Decker's infringing activities in the State of Texas and throughout the United States which were calculated to and have caused substantial harm to the Board of Regents, an agency of the State of Texas. Even after warning from Hydro-Québec that A123's battery products infringe the Board of Regents' '382 Patent, Black & Decker began marketing and selling, and is continuing to market and sell, the infringing products in Texas. Black & Decker does not contest that venue is proper in this Court, or this Court's exercise of personal jurisdiction over Black & Decker.

Response:

Black & Decker denies the allegations contained in Paragraph 9 of the Second Amended Complaint.

10. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b) and 1400(b) because: (a) Black & Decker (U.S.) maintains offices and agents in this District, including Black & Decker DeWalt power tool service centers, and has a designated registered agent for service of process in Dallas County, Texas; (b) this Court has personal jurisdiction over the corporate defendants in this District; and (c) a substantial number of the events giving rise to Plaintiffs claims occurred in Dallas County, Texas — namely Defendants are committing numerous acts of patent infringement in this District by selling infringing products.

Response:

Black & Decker admits that venue is proper in this judicial district, but denies the legal sufficiency of Plaintiffs' claims and allegations with respect to Black & Decker and denies that Plaintiffs have any viable claim thereunder. With respect to other parties, Black & Decker lacks sufficient knowledge and information to form a belief as to the truth of the allegations contained in Paragraph 10 of the Second Amended Complaint, and therefore denies those allegations. To the extent not expressly admitted, Black & Decker denies the allegations contained in Paragraph

10 of the Second Amended Complaint.

11. Located in Austin, Texas, UT is one the finest universities in the country and is home to approximately 50,000 students, 3,000 faculty, and 18,000 staff members. The University is recognized worldwide for the numerous contributions of its faculty to advance research in the areas of genetics, chemistry, and engineering.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 11 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

12. Since the 1980's, the Department has provided facilities in which world-class scientists and engineers conduct modern materials research. Examples of the program's projects include: (a) the design, synthesis, characterization, and fabrication of new or improved materials for structural, microelectronic, magnetic, dielectric, and optical devices; (b) the production of nanostructure materials for mechanical, superconductor, and optical applications; (c) the exploration of advanced structural mechanics; and (d) the creation of alternate methods of energy conversion and storage, including the development of high-performance battery technology. Since 1998, the Department has been operated as the degree component of the Texas Materials Institute (the "Institute"), which was established to ensure the continuing availability of the resources necessary to support modern materials science research.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 12 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

13. The many advancements that have emanated from the University in materials science research are the result of the combination of resources and the talent that the University has assembled under the leadership of Dr. John Goodenough. Professor Goodenough, who became a professor at UT and a member of the Materials Science and Engineering Program in 1986, is the most distinguished member of the Department and the Institute. Dr. Goodenough has made substantial contributions in the area of materials science and is internationally known for his discoveries of various materials for use in high-performance batteries, including two cathode materials widely used today and for the past two decades in the commercial lithium-ion battery industry. Since joining UT, Dr. Goodenough has published extensively in these areas, has been

issued numerous U.S. patents for his work, and has received a plethora of honors, including the prestigious Japan Award — Japan's scientific equivalent of the Nobel Prize — for his work in the area of battery technology. Dr. Goodenough was recently awarded the 2009 Enrico Fermi Award by the President of the United States "[f]or his lasting contributions to materials science and technology, especially the science underlying lithium-ion batteries," including the development of "olivine cathode materials of which LiFePO4, in particular, has been commercialized for power applications." The Enrico Fermi Award is bestowed by the President to individuals of international stature in recognition of a lifetime of exceptional scientific achievements related to the development, use, control, or production of energy.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 13 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

14. In 1994, Dr. Goodenough directed two researchers to explore various reduction-oxidation couples with polyanions for use in rechargeable batteries. It was this research which led to the invention of the lithium metal phosphate battery technology that is the subject of the present dispute.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 14 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

15. In connection with that research, the UT researchers discovered the utility of using the olivine form of various compounds containing lithium (Li), iron (Fe), and phosphate (PO_4) as cathodes in lithium-ion batteries. Dr. Goodenough immediately recognized the significance of this discovery and instructed them to synthesize quantities of the olivine form of $LiFePO_4$ and other lithium metal phosphate compounds of the general formula $LiMPO_4$ using other transition metals to determine the efficacy of such compounds as cathodes in lithium-ion batteries.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 15 of Plaintiffs' Second Amended Complaint and therefore denies those

allegations.

16. On April 23, 1996, the Board of Regents, as the assignee of Professor Goodenough and the other inventors, filed a provisional patent application with the United States Patent and Trademark Office ("USPTO"), covering the olivine form of lithium metal phosphate compounds, including lithium iron phosphate, as cathodes in rechargeable batteries. The Board of Regents filed another provisional United States patent application on December 4, 1996, and filed the ultimate patent application on the technology on April 21, 1997.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 16 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

17. On June 8, 1999, the '382 Patent, entitled "Cathode Materials for Secondary (Rechargeable) Lithium Batteries," issued in favor of the Board of Regents, as assignee of the inventors. The '382 Patent claims cover, among other inventions, secondary (rechargeable) batteries with cathodes "comprising" (*i.e.*, including, but not necessarily limited to) lithium (Li), phosphate (PO_4), and one or more metal cations (M) including at least one first row transition metal, such as iron (Fe), in an olivine form compound. Such compounds are represented by the general formula "$LiMPO_4$." The named inventors on the '382 Patent are Dr. John Goodenough, Dr. Akshaya Padhi ("Dr. Padhi"), Dr. Kirakodu Nanjundaswamy ("Dr. Swamy"), and Dr. Christian Masquelier ("Dr. Masquelier").

Response:

Black & Decker admits that U.S. Patent No. 5,910,382 bears an issue date of June 8, 1999. Black & Decker lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 17 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

18. On December 24, 1997, the Board of Regents filed a United States continuation in-part patent application, based on certain aspects of the original applications which led to the issuance of the '382 Patent. On February 4, 2003, the '640 Patent, also entitled "Cathode Materials for Secondary (Rechargeable) Lithium Batteries," issued in favor of the Board of Regents. The claims of the '640 Patent cover, among other things, cathodes comprised of certain ordered olivine or modified olivine mixed-metal lithium phosphate compounds such as, for

example, lithium iron niobium phosphate ($LiFeNbPO_4$). The named inventors on the '640 Patent are Dr. Michel Armand, Dr. Goodenough, Dr. Padhi, Dr. Swamy, and Dr. Masquelier.

Response:

Black & Decker admits that U.S. Patent No. 6,514,640 B1 bears an issue date of February 3, 2003. Black & Decker lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 18 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

19. After having been placed on notice that it was infringing the '382 Patent and the '640 Patent, on September 8, 2006, A123 filed in the USPTO separate requests for *ex parte* examination of both of those patents.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 19 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

20. On April 15, 2008, the USPTO issued an *Ex Parte* Reexamination Certificate confirming the patentability of amended claims 1-9 and new claims 10-11 of the '382 Patent, referred to herein as the R382 Patent. On May 12, 2009, the USPTO issued an Ex Parte Reexamination Certificate confirming the patentability of amended claims 1-6 and 10-24 of the '640 Patent, referred to herein as the R640 Patent. The '382 Patent, the R382 Patent, the '640 Patent, and the R640 Patent are collectively referred to herein as the "Goodenough Patents." Plaintiffs' infringement claims are now predicated solely on the R382 Patent and the R640 Patent, although Defendants' liability for infringement of claim 9 of the R382 Patent commences from the date of issuance of the '382 Patent because that claim was not substantively amended during reexamination.

Response:

Black & Decker admits that after being found invalid as originally issued, U.S. Patent No. 5,910,382 C1 was issued by the U.S. Patent Office after amendment of all original claims. Black & Decker admits that after being found invalid as originally issued, U.S. Patent No.

6,514,640 C1 was issued by the U.S. Patent Office after amendment of all independent claims, among others. Black & Decker lacks knowledge or information sufficient to form a belief as to the remaining allegations of Paragraph 20 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

21. After filing the provisional applications on the '382 Patent, the Board of Regents began negotiations with Hydro-Québec to license the invention.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 21 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

22. Effective January 1, 1997, the Board of Regents and Hydro-Québec entered into a Patent License Agreement, whereby Hydro-Québec obtained the exclusive license to make, use and sell a significant portion of the field of technology described and claimed in the '382 Patent and any continuation-in-part patents, including, without limitation, the '640 Patent, and any reissues and reexaminations of those patents, as well as the right to sub-license that technology. Specifically, pursuant to the Patent License Agreement, the Board of Regents granted to Hydro-Québec an exclusive license to manufacture, have manufactured, use, sell, import, and offer for sale products (including both cathode materials and batteries) covered by the '382 Patent within the field of "primary and secondary electrochemical generators having a solid electrolyte, gelled, plasticized or not plasticized, comprising a solution of at least one metallic salt in an aprotic polymeric material." In exchange, the Board of Regents received an up front payment and the right to receive royalty payments from Hydro-Québec and its sub-licensees.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 22 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

23. The Patent License Agreement has been amended on three occasions — March 1, 1998, June 1, 1999 and January 11, 2006 (hereinafter, the "Amendments"). Each of the Amendments expanded the exclusive rights granted to Hydro-Québec with respect to the

patented technology. Among the additional rights granted to Hydro-Québec pursuant to the second amendment was "a royalty-bearing, exclusive, worldwide license to manufacture $LiFePO_4$ and sell $LiFePO_4$ in bulk quantities for all applications of the technology." As a result, Hydro-Québec has the exclusive right, power, and privilege to manufacture (or, through sub-licensees, control the production of) patented cathode materials including $LiFePO_4$ — the critical cathode material of the world's next generation of rechargeable batteries for computers, power tools, mobility products, such as electric scooters, consumer electronics, cell phones, large-scale power storage applications, and hybrid electric vehicles (HEVs).

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 23 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

24. Under the Patent License Agreement and Amendments, the Board of Regents retained the right to license other parties in other fields of use, including the right to license: (1) the production, use, and sale of lithium-ion batteries having a liquid electrolyte; and (2) the use and sale of LiFePO4 as a cathode material for liquid electrolyte applications.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 24 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

25. Under the Patent License Agreement and Amendments, Hydro-Québec assumed the duty of enforcing the '382 and '640 Patents against infringement by third-parties.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 25 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

26. In May 1996, at the annual meeting of the Electrochemical Society ("ECS"), Dr. Goodenough and the members of his research team, Dr. Padhi, Dr. Swamy, and Dr. Masquelier,

presented research on the use of the olivine form of LiFePO4 as a cathode in secondary batteries. A subsequent publication on their work, entitled "*Phospho-olivines as Positive Electrode Materials for Rechargeable Lithium Batteries*," Padhi, et al., J. Electrochem. Soc., 144, 1188 (Apr. 1997), is universally recognized and cited by those in the scientific industry as being the first published article to recognize that the olivine form of $LiFePO_4$ can be beneficially used as a cathode in rechargeable batteries.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 26 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

27. Scientists throughout the world have recognized the importance of Professor Goodenough's invention — and Hydro-Québec's rights therein — and have concluded that the $LiFePO_4$-based compounds will be the critical components of the next-generation of rechargeable batteries. For example, in an article published in *Nature Materials*, Vol. 1, October 2002, Dr. Michael Thackeray of the Argonne National Laboratory wrote in 2002:

> Lithium iron phosphate, $LiFePO_4$, was first reported as a positive electrode for rechargeable lithium-ion batteries in 1997 by John Goodenough and co-workers at The University of Texas, Austin. Perhaps not surprisingly, it was also John Goodenough who, in 1980, while at Oxford University, first reported that $LiCo0_2$ [lithium cobalt oxide] could be used as a high-potential electrode for lithium batteries. But despite its widespread use, $LiCo0_2$ is a relatively expensive material. $LiFePO_4$ would, therefore, be an attractive low-cost alternative.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 27 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

28. In another article published in Nature Materials, Vol. 1, October 2002, Dr. Yet-Ming Chiang, A123's co-founder, and two other professors within the Materials Science and Engineering Department at the Massachusetts Institute of Technology ("MIT"), wrote:

> Now, sparked by work from Goodenough's laboratory, there is great interest in polyanion compounds as lithium storage electrodes for rechargeable batteries ... Lithium transition metal phosphates have become of great interest as storage cathodes for rechargeable lithium batteries because of their high energy

density, low raw materials cost, environmental friendliness and safety.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 28 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

29. In the spring of 2009, the ECS published a special issue of its magazine to celebrate the scientific contributions of its members. Leading scientists and ECS members were polled to determine which specific papers in the Journal of the Electrochemical Society's (the "Journal") one hundred year history had the greatest impact on the scientific community. The ECS published a list of "the classics" which comprised 100 of the most-cited Journal articles — the Padhi, et al. paper entitled "*Phospho-olivines as Positive Electrode Materials for Rechargeable Lithium Batteries*," was ranked fourth on that list.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 29 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

30. Secondary batteries comprising lithium metal phosphate and/or lithium mixed-metal phosphate cathodes covered by the Goodenough Patents can power virtually every type of electronic device, including cordless power tools, cell phones, microelectronics, lap-top computers, and digital cameras, to name a few. Other applications of lithium metal and mixedmetal phosphate batteries covered under the Goodenough Patents include back-up power supply units for utility companies, wheelchairs, scooters, and other vehicles such as hybrid electric vehicles.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 30 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

31. The importance of the patented technology at issue in this action is beyond dispute. Nevertheless, A123 is knowingly infringing the R382 and R640 Patents and, thus, depriving Plaintiffs of their valuable patent rights.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 31 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

32. Founded in 2001 by MIT Professor Yet-Ming Chiang and others, A123 purports to be a "developer of a new generation of lithium-ion batteries." In truth, A123 is a willful infringer of Plaintiffs' patent rights. Whatever commercial notoriety A123 has enjoyed to date is due to the technology claimed in the R382 and R640 Patents.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 32 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

33. Professor Chiang's and A123's dependence on Plaintiffs' technology is well known. *Science News Online* reported the following in its September 28, 2002 edition:

> In 1997, researchers at the University of Texas in Austin proposed a new cathode material, lithium iron phosphate, which is cheaper and safer than lithium cobalt oxide ... Now, Yet-Ming Chiang and his coworkers at the Massachusetts Institute of Technology have spiced lithium iron phosphate with small amounts of metal ions — such as aluminum, niobium, and zirconium — in a process called doping.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 33 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

34. What that article failed to mention is that the "researchers" who proposed lithium iron phosphate as a cathode material — Dr. John Goodenough and the scientists working under his direction at UT's Material Science and Engineering Department — are named inventors on issued patents covering that technology and, furthermore, that any use, production, or sale of MIT's "spiced" or "doped" versions of that patented material constitutes an infringement of Plaintiffs' patent rights.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 34 of Plaintiffs' Second Amended Complain and therefore denies those allegations.

35. With full knowledge of the foregoing, MIT nevertheless publicized its continuing use and manipulation of Plaintiffs' patented technology just one month later, on MIT's *News Office* website, dated October 23, 2002:

> For several years, researchers in the battery community have been interested in finding a replacement for one of the materials key to state-of-the-art rechargeable batteries. That compound, composed of lithium, cobalt and oxygen, works well in general but is very expensive. Safety factors also limit the size of the battery that can be made with the material. "It's highly reactive with other battery components when charged, which can lead to overheating," explained Chiang, the Kyocera Professor of Ceramics. In 1997, a team at the University of Texas at Austin identified a potential replacement. Among other attributes, lithium iron phosphate was cheap, environmentally friendly and safe.

The article went on to describe Chiang's attempts to improve $LiFePO_4$ cathodes by "essentially spiking the original material with tiny amounts of metal." Of course, whether called "spiking," "doping," or "spicing," the substitution of some of the iron (Fe) with other metals, such as niobium (Nb), was covered by the original '640 Patent and is now covered by the R640 Patent.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 35 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

36. Chiang and his colleagues at MIT have filed one or more applications for United States patents to cover their purported "invention" of olivine $LiFePO_4$ cathodes spiked with small amounts of one or more other metals, such as niobium (Nb). In evaluating those applications, the

USPTO recognized that MIT's patent claims as originally drafted were covered by the Goodenough Patents. For example, on January 20, 2006, the USPTO rejected Chiang's patent application filed December 23, 2002, for claims covering *inter alia*, niobium-spiked $LiFePO_4$ "as being unpatentable over Goodenough et al, US 5,910,382" — the '382 Patent. Although MIT eventually obtained a patent on March 4, 2008, based on that application, its validity is questionable in light of the '640 Patent and the R640 Patent. More significantly, A123's practice of its patent requires a license under the base or pioneer Goodenough Patents.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 36 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

37. A123's claim to patent protection on its cathodes is deceptive and misleading in light of its failure to obtain a license under the *pioneer* R382 and/or R640 Patents — the intellectual property on which commercial success of Chiang and A123 necessarily depends.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 37 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

38. In an article published on November 2, 2005, entitled "Battery Pumps Up Power Tools - A new lithium-ion battery from startup A123 Systems promises five time as much power for 10 times as long as competitors," A123's CEO, David Vieau, bragged: "We expect that our technology will have the same impact on high-power products as the introduction of first generation lithium-ion technology had on the development and commercialization of consumer electronics in the 1990s." That same day, A123 announced that it had entered into an agreement to sell to Black & Decker batteries to be used and installed in Black & Decker's entire DeWalt line of 36-volt cordless power tools available in 2006.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 38 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

39. By letter dated November 14, 2005, Hydro-Québec placed A123 and Black & Decker on notice that "the '382 patent is being infringed by the lithium metal phosphate technology that you are manufacturing, marketing and selling in the United States." Hydro-Québec's letter "demand[ed] that A123 immediately cease and desist infringement of the '382 patent."

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 39 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

40. A123 and Black & Decker ignored Hydro-Québec's demand. Indeed, at the Advanced Automotive Battery Conference held in Baltimore, Maryland, on May 15-19, 2006, Rick Fulop, one of A123's founders and its Vice President of Business Development and Marketing, made a presentation, entitled, "High-Power, Long-Life Power Tool Batteries Using Lithium-Ion Nanophosphate Cathodes." Mr. Fulop provided a demonstration of Al23's lithium-ion batteries in Black & Decker's DeWalt line of 36-volt cordless power tools and announced that the products would be available in Home Depot and Lowes stores nationwide that coming weekend. He also announced that A123 had plans to market its battery products for use in hybrid electric vehicles and portable medical products. During the question and answer session following his presentation, Mr. Fulop was asked to describe A123's cathode material. Fulop replied that the material "is $LiFePO_4$, but improved."

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 40 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

41. In June 2006, Black & Decker's new line of DeWalt 36-volt cordless power tools containing the A123 infringing batteries became available in Home Depot and Lowes stores throughout the country, including stores located in Dallas County, Texas.

Response:

Denied.

42. Plaintiffs have scientifically tested the A123 batteries in Black & Decker's DeWalt line of 36-volt cordless power tools and have determined that the cathode material is a composition of olivine $LiFePO_4$, niobium (Nb), magnesium (Mg), and manganese (Mn). Thus, Defendants have infringed, and are infringing, one or more claims of each of the patents-in-suit.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 42 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

43. Plaintiffs reallege and incorporate the allegations set forth in the preceding paragraphs as if set forth in full herein.

Response:

Black & Decker realleges and incorporates its responses and objections to the preceding paragraphs as if set forth in full herein.

44. The R382 Patent and the R640 Patent are valid, enforceable, and in full force and effect. The validity of the those patents is not only presumed as a matter of law pursuant to 35 U.S.C. § 282, but is further reflected in: (a) their acceptance by the Board of Regents' and Hydro-Québec's licensees and sub-licensees; (b) the widespread recognition and acclaim that the inventors have received throughout the battery industry and marketplace as the innovators of that ground-breaking technology in the field of secondary power sources; and (c) the USPTO's approval of the R382 Patent and the R640 Patent in light of the lengthy and numerous prior art arguments raised by A123 in its *Ex Parte* Requests for Reexamination.

Response:

Black & Decker denies all allegations contained in paragraph 44 of the Second Amended Complaint.

45. Defendants have infringed, engaged in acts of contributory infringement and/or induced the infringement of one or more claims of each of the patents-in-suit, by manufacturing, having manufactured, using, importing into the United States, selling and/or offering to sell cathodes and secondary battery products that embody, incorporate and/or practice one or more of those claims. Moreover, Defendants continue to engage in such unlawful conduct.

Response:

Black & Decker denies all allegations contained in paragraph 45 of the Second Amended Complaint.

46. Having been placed on notice of the Goodenough Patents and their infringement thereof, A123's and Black & Decker's continued production and sale of infringing products constitutes a willful violation of the U.S. patent laws.

Response:

Black & Decker denies all allegations contained in paragraph 46 of the Second Amended Complaint.

47. Plaintiffs have implemented a well-conceived, efficient, and effective plan for commercializing the patented lithium iron phosphate battery technology. Specifically, Hydro-Québec and/or the Board of Regents currently sub-license Phostech Lithium, Inc. and Sony Corporation to practice, make, use, or sell the inventions in which it has exclusive rights. Each of those sub-license agreements is carefully-crafted with respect to the specific field of use in which the sub-licensee may utilize Hydro-Québec's and/or the Board of Regents' rights in the Goodenough Patents. Indeed, Sony recently announced that it had commenced shipping secondary batteries with the patented olivine-type lithium iron phosphate cathodes in June 2009. Those batteries are intended for use in motor driven devices such as power tools and in a wide range of mobile electronic devices such as mobile phones and netbooks.

Response:

Black & Decker lacks knowledge or information sufficient to form a belief as to the allegations of Paragraph 47 of Plaintiffs' Second Amended Complaint and therefore denies those allegations.

48. Defendants' infringing activities threaten to irreparably harm Hydro-Québec and the Board of Regents by destroying their plan for commercializing the Goodenough Patents.

Response:

Black & Decker denies all allegations contained in paragraph 48 of the Second Amended Complaint.

49. The balance of equities favors Hydro-Québec and the Board of Regents. They own and control the rights to commercialize, and reap the benefits from the production of, patented lithium iron phosphate cathodes. Defendants are willful infringers who are unlawfully producing and deceptively selling infringing products. In the absence of an injunction, Hydro-Québec's and the Board of Regents' carefully-formulated plan for commercializing the patented technology through a few highly-qualified manufacturers and sellers will be destroyed, as will be the goodwill associated with the Goodenough Patents. Without injunctive relief, Hydro-Québec and the Board of Regents will lose their right to control the quality and purity of the patented cathodes in the lithium iron phosphate batteries now being distributed to the public. That control is of critical importance to Hydro-Québec and the Board of Regents, given that the market for $LiFePO_4$-based battery products has gained commercial traction, and initial positive public response will help to drive future acceptance by a greater number of consumers.

Response:

Black & Decker denies all allegations contained in Paragraph 49 of the Second Amended Complaint.

50. Therefore, Plaintiffs respectfully request that this Court issue a permanent injunction prohibiting Defendants, and their officers, directors, employees, agents, subsidiaries, affiliates and all those in active concert with them, from: (a) infringing, contributing to the infringement, or inducing the infringement of the R382 and R640 Patents; and (b) making, having made, using, selling, offering for sale, or importing any cathodes or battery products, systems, or component parts embodying, incorporating and/or practicing any of the inventions described and claimed in the R382 and R640 Patents, including, but not limited to, any other battery products utilizing olivine lithium iron phosphate.

Response:

Black & Decker denies all allegations contained in paragraph 50 of the Second Amended Complaint.

51. Plaintiffs reallege and incorporate the allegations set forth in the preceding paragraphs as if set forth in full herein.

Response:

Black & Decker realleges and incorporates its responses and objections to the preceding paragraphs as if set forth in full herein.

52. In addition to permanent injunctive relief to prevent Defendants from engaging in further acts of infringement in violation of the R382 Patent and the R640 Patent, Plaintiffs seek an award of money damages to compensate them fully for the injuries they have sustained as a result of Defendants' infringement of one or more claims of each of the patents-in-suit.

Response:

Black & Decker denies all allegations contained in paragraph 52 of the Second Amended Complaint.

53. Accordingly, pursuant to 35 U.S.C. § 284, Plaintiffs seek an award of damages in the amount assessed by the jury to compensate them for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as determined by the Court.

Response:

Black & Decker denies all allegations contained in paragraph 53 of the Second Amended Complaint.

54. Furthermore, Plaintiffs request that the Court increase the damages up to three times the amount found or assessed by the jury pursuant to 35 U.S.C. § 284.

Response:

Black & Decker denies all allegations contained in paragraph 54 of the Second Amended Complaint.

BLACK & DECKER'S AFFIRMATIVE DEFENSES

Further answering the Second Amended Complaint and as additional defenses thereto, Black & Decker asserts the following affirmative defenses:

FIRST DEFENSE

Black & Decker has not infringed and does not infringe any valid claim of Reexamined U.S. Patent No. 5,910,382 C1, or Reexamined U.S. Patent No. 6,514,640 C1 (collectively "the patents-in-suit") directly or indirectly.

SECOND DEFENSE

Some or all claims of the patents-in-suit are invalid for failure to satisfy one or more of the requirements of the Patent Act, 35 U.S.C. § 1, *et seq*., including, but not limited to, the conditions of patentability set forth in 35 U.S.C. §§ 101, 102, 103, and 112.

THIRD DEFENSE

Prosecution history estoppels preclude Plaintiffs from maintaining that any claim of the patents in suit covers any of the accused devices and/or services.

FOURTH DEFENSE

Plaintiffs' claims are barred by the doctrine of prosecution history laches.

FIFTH DEFENSE

Plaintiffs' claims are barred in whole or in part by the doctrine of estoppel.

SIXTH DEFENSE

Plaintiffs' claims are barred by a lack of standing to assert the patents-in-suit.

SEVENTH DEFENSE

Plaintiffs are not entitled to any injunctive relief because any alleged injury to Plaintiffs is not immediate or irreparable, and Plaintiffs have an adequate remedy at law for any alleged injury.

EIGHTH DEFENSE

To the extent Plaintiffs seek damages for any alleged infringement prior to their giving actual notice of the patents in suit to Black & Decker, their claims are barred pursuant to 35 U.S.C. § 287(a).

NINTH DEFENSE

Plaintiffs' claims for relief and alleged damages are limited and/or barred by absolute and equitable intervening rights under 35 U.S.C. § 252.

TENTH DEFENSE

Plaintiffs have failed to state a claim upon which relief may be granted.

RESERVATION OF RIGHTS

Black & Decker reserves the right to add any additional defenses or counterclaims that discovery may reveal.

COUNTERCLAIMS

For its counterclaims against Plaintiffs, Black & Decker states as follows:

1. Black & Decker (U.S.) Inc. ("Black & Decker") is a Maryland corporation and a wholly-owned subsidiary of The Black & Decker Corporation with its principal place of business in Towson, Maryland.

2. Upon information and belief Plaintiff Board of Regents of the University of Texas System is an agency of the State of Texas, located at 201 West 7th Street, Austin, Texas 78701.

3. Upon information and belief Plaintiff Hydro-Québec is a foreign corporation with its principal place of business in Canada.

4. These counterclaims arise under federal law, and this Court has jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338, 2201, and 2201, and the Patent Laws of the United States, 35 U.S.C. § *et seq.*

5. Venue is proper under 28 U.S.C. § 1391 and 1400(b)

6. Plaintiffs The Board of Regents of the University of Texas System and Hydro-Québec have asserted that Black & Decker infringes Reexamined U.S. Patent Nos. 5,910,382 C1

and 6,514,640 C1 (collectively "the patents-in-suit"). An actual controversy exists between The Board of Regents of the University of Texas System and Hydro-Québec and Black & Decker over the alleged infringement, invalidity, and unenforceability of those patents-in-suit.

FIRST COUNTERCLAIM

7. Black & Decker incorporates and realleges Paragraphs 1 through 6 of its counterclaims as though fully set forth herein.

8. Black & Decker has not infringed and does not directly or indirectly infringe any valid, enforceable claim of the patents-in-suit, either literally or under the doctrine of equivalents.

SECOND COUNTERCLAIM

9. Black & Decker incorporates and realleges Paragraphs 1 through 8 of this counterclaims as though fully set forth herein.

10. The patents-in-suit are invalid for failing to satisfy one or more of the requirements of the Patent Act, 35 U.S.C. § 1, *et seq*., including, but not limited to, the conditions of patentability set forth in 35 U.S.C. §§ 101, 102, 103, and 112.

DEMAND FOR A JURY TRIAL

Black & Decker demands a jury trial, pursuant to Fed. R. Civ. P. 38(b), on all claims and counterclaims and as to all issues that may be tried by a jury.

PRAYER FOR RELIEF

FOR THESE REASONS, Black & Decker respectfully requests that this Court enter judgment in their favor and grant the following relief:

1. An order declaring that The Board of Regents of the University of Texas System and Hydro-Québec take nothing from Black & Decker on the claims asserted in the Complaint.

2. A declaration that Black & Decker does not infringe any of the patents-in-suit;

3. A declaration that the patents-in-suit are invalid;

4. Judgment against The Board of Regents of the University of Texas System and Hydro-Québec and in favor of Black & Decker;

5. Dismissal of the Second Amended Complaint with prejudice;

6. An order declaring that this is an exceptional case under 35 U.S.C. § 285;

7. An award to Black & Decker of its costs, expenses, and reasonable attorney fees order under 35 U.S.C. § 285 and all other applicable statutes, rules, and common law; and

8. Any such other relief as the Court may deem appropriate and just under the circumstances.

Respectfully submitted,

/s/ Paul C. Gibbons
Dean D. Niro
Paul C. Gibbons
David J. Mahalek
NIRO, HALLER & NIRO
181 W. Madison Street, Suite 4600
Chicago, IL 60602
Tel: (312) 236-0733

Jonathan T. Suder
FRIEDMAN SUDER & COOKE
Tindall Square Warehouse No. 1
604 E. 4th Street, Suite 200
Fort Worth, Texas 76102

COUNSEL FOR BLACK & DECKER (U.S.) INC. AND THE BLACK & DECKER CORPORATION

CERTIFICATE OF SERVICE

I certify that on June 7, 2010, I caused a true and correct copy of the above **THE BLACK & DECKER CORPORATION AND BLACK & DECKER (U.S.) INC.'S ANSWER TO PLAINTIFFS' SECOND AMENDED COMPLAINT, COUNTERCLAIMS, AND JURY DEMAND** to be sent via the Court's electronic case filing system which will to the following counsel of record:

Kevin J. Meek
James W. Cannon
Darryl J. Adams
BAKER BOTTS L.L.P.
98 San Jacinto Blvd., Suite 1500
Austin, TX 78701

Melissa Scioneaux
BAKER BOTTS L.L.P.
2001 Ross Avenue
Dallas, TX 75201-2980

COUNSEL FOR THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM and HYDRO-QUEBEC

Kathleen M. LaValle
John M. Jackson
JACKSON WALKER, LLP
901 Main Street, Suite 6000
Dallas, Texas 75202

Wayne L. Stoner, Esq.
Mary Rose Scozzafava, Esq.
Christopher G. Lim, Esq.
Christopher R. Noyes, Esq.
Christopher Lim, Esq.
WILMER CUTLER PICKERING HALE AND DORR LLP
60 State Street
Boston, MA 02109
COUNSEL FOR A123 SYSTEMS, INC.

/s/ Paul C. Gibbons